

ATTACHMENT E-2

**GEOTECHNICAL REVIEW OF SHALLOW GROUNDWATER
AND POTENTIAL DEWATERING DURING GRADING AND
CONSTRUCTION**

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June 12, 2024

Project No. 23111-01

To: C.J. Segerstrom & Sons
3315 Fairview Road
Costa Mesa, California 92626

Attention: Jeffrey M. Reese

Subject: Geotechnical Review of Shallow Groundwater and Potential Dewatering during Grading and Construction, Lake Center Office Park Redevelopment Project, City of Santa Ana, California

Reference: NMG Geotechnical, 2024, Geotechnical Design Report for Lake Center Office Park Redevelopment, South Coast Technology Center, 3100 Lake Center Drive, City of Santa Ana, California, Project No. 23111-01, dated April 18, 2024.

At your request, NMG Geotechnical, Inc. (NMG) has prepared this letter to provide our geotechnical review and input regarding the shallow groundwater conditions and the potential for temporary dewatering during grading and construction at the subject Lake Center Office Park redevelopment project. We understand the referenced report is being used for the geology and soils technical appendix for the environmental/CEQA document. A comment from EPD, the City EIR/CEQA reviewer, requested that additional discussion be provided for the potential need for dewatering during construction.

NMG performed a site-specific geotechnical investigation and prepared the referenced NMG, 2024 report that provides our geotechnical findings and design recommendations for the subject project. Based on our borings, trenches, and other data in the area, the existing shallow groundwater at the subject site is currently 10 to 15 feet deep (elevation 26 to 21 feet above mean sea level) from both existing and design grades. This shallow groundwater table fluctuates seasonally and annually over time.

The design high groundwater in the area is 5 feet deep based on the states mapping of the historic levels in the area. NMG's foundation and settlement evaluation considered both the existing and design high groundwater conditions at the site. It is questionable that the groundwater would rise to the historic high again.


The recommended remedial grading excavations and the new onsite utilities will be approximately 5 to 8 feet deep from the design finish grades, except for the sewer line connection in the adjacent street that will be up to 14 feet deep. The excavation for the sewer line connection will dive down into the right-of-way to connect to the main sewer line in the street. The trench excavations for the

shallow utilities onsite are anticipated to remain above the groundwater level. The recommended remedial removals are anticipated to be 2 to 3 feet above the groundwater level. The parking garage demolition is also not anticipated to encounter the groundwater. Wet soil and some groundwater are generally anticipated only for the sewer connection excavation in the street.

If you have any questions regarding this document, please contact our office. We appreciate the opportunity to provide our services.

Respectfully submitted,

NMG GEOTECHNICAL, INC.



Terri Wright, CEG 1342
Principal Geologist



Karlos Markouizos, RCE 50312
Principal Engineer

KGM/TW/ad

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